

Application No. 10/691,272
Response dated: September 18, 2006
Reply to Final Office action of August 8, 2006

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REMARKS

In response to the Office action dated August 8, 2006, Applicants respectfully request reconsideration based on the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-16 are pending in the present Application for consideration upon entry of the following remarks. Claims 1, 9 and 13 have been amended, leaving Claims 1-16 for consideration upon entry of the present amendment and following remarks.

Support for the amendment to Claim 1 is at least found in the specification, the figures, and the claims as originally filed. More particularly, support for amended Claim 1 is at least found in the specification at Page 6, lines 16-18. Support for Claims 9 and 13 is at least found in the specification at Page 10, lines 21-24, Page 11, lines 20-23 and Figures 3A and 3B.

Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. §102

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Hunka, U.S. Patent No. 4,114,034 (hereinafter "Hunka"). Applicants respectfully traverse.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Amended Claim 1 recites, *inter alia*,

"... a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being outwardly protruded from the case ..."

In the details of the Office action at Page 5, the Examiner cites Figures 1 and 3 as disclosing all of the limitations of Claim 1. The Examiner further refers to a "beam splitter" (Element 12) and a "lens system" (Element 14) of Figure 1 of Hunka as disclosing the "light guide" of the claimed invention.

Hunka discloses a "beam splitter and a lens system, which projects the image from a viewing aperture onto a photosensitive array." (See Col. 2, lines 19-23 and Figure 1.) As

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illustrated in Figure 1, both the "beam splitter" (Element 12) and the "lens system" (Element 14) are entirely contained in the "housing" (Element 110). (See Figure 1.) That is, no part of the "beam splitter" or the "lens system" is "outwardly protruded from the case." Therefore, Hunka does not disclose or teach a "a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being outwardly protruded from the case."

Therefore, Hunka does not disclose all of the limitations of amended Claim 1. Accordingly, Hunka does not anticipate amended Claim 1. Applicants respectfully submit that amended Claim 1 is not further rejected or objected and is therefore allowable. Reconsideration and allowance of Claim 1 is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

Claims 2-6

Claims 2-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hunka in view of Son, U.S. Patent No. 6,741,234 (hereinafter "Son"). Applicants respectfully traverse.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Claims 2-6 variously depend from Claim 1 and inherit all of the limitations of Claim 1. As discussed above, Hunka does not teach all of the limitations of amended Claim 1, particularly "... a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being outwardly protruded from the case ..."

Son is relied upon as teaching "the light guide" is a "prism" of the claimed invention. Son discloses a total reflection prism for allowing light emitted from a light source and *irradiated through the irradiating lens* to be located on a path where totally reflected light upon

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the surface advances. (See Abstract, Son.) The prism 30 as illustrated in FIG. 7 and described in Son at Col. 3, lines 44-51 is entirely contained in the housing 26. That is, no part of the prism 30 is exposed to the outside of the housing 26. Therefore, Son also does not teach or "a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being outwardly protruded from the case" of amended Claim 1 and does not remedy the deficiencies of Hunka.

Thus, Hunka and Son, alone or in combination, do not teach or suggest *all of the limitations* of amended Claims 2-6. Accordingly, *prima facie* obviousness does not exist regarding Claims 2-6 with respect to Hunka and Son.

Since Hunka and Son fail to teach or suggest all of the limitations of Claims 2-6, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify or combine the references, or a reasonable likelihood of success in forming the claimed invention by the Examiner's suggestion of modifying or combining the reference. Thus, here again, *prima facie* obviousness does not exist.

Thus, the requirements of *prime facie* obviousness are not met by the Examiner's suggestion to combine Hunka and Son. Applicants respectfully submit that Claims 2-6 are not further rejected or objected and are therefore allowable. Reconsideration and allowance of Claims 2-6 are respectfully requested.

Claims 7 and 8

Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hunka in view of Seo, U.S. Patent No. 5,992,749 (hereinafter "Seo"). Applicants respectfully traverse.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

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Claims 7 and 8 variously depend from Claim 1 and inherit all of the limitations of Claim 1. As discussed above, Hunka does not teach all of the limitations of amended Claim 1, particularly "a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being outwardly protruded from the case."

Seo is relied upon as teaching "irradiating external light onto the worktable" of the claimed invention. Seo discloses a prism 60 upon which light reflected by a mirror 40 is incident and the prism 60 is *provided in* and fixed to the casing. (Col. 3, lines 48-50 and Figures 1, 5, 9 and 11. The prism 60 as illustrated and described in Seo is entirely contained in the casing 11. That is, no part of the prism 60 is exposed to the outside of the casing 11. Therefore, Seo also does not teach or suggest a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being outwardly protruded from the case of amended Claim 1 and does not remedy the deficiencies of Hunka.

Thus, Hunka and Seo, alone or in combination, do not teach or suggest *all of the limitations* of Claims 7 and 8. Accordingly, *prima facie* obviousness does not exist regarding Claims 7 and 8 with respect to Hunka and Seo.

Since Hunka and Seo fail to teach or suggest all of the limitations of Claims 7 and 8, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify or combine the references, or a reasonable likelihood of success in forming the claimed invention by the Examiner's suggestion of modifying or combining the reference. Thus, here again, *prima facie* obviousness does not exist.

Thus, the requirements of *prime facie* obviousness are not met by the Examiner's suggestion to combine Hunka and Seo regarding Claims 7 and 8. Applicants respectfully submit that Claims 7 and 8 are not further rejected or objected and are therefore allowable. Reconsideration and allowance of Claims 7 and 8 are respectfully requested.

Claims 9-16

Claims 9-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyon, U.S. Patent No. 4,521,772 (hereinafter "Lyon") in view of Perret, Jr., et al., (U.S. Patent No. 5,736,686 (hereinafter "Perret")). Applicants respectfully traverse.

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For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Firstly, at Pages 9 and 10 of the Office action, it is conceded that Lyon does not explicitly disclose the components of the light concentrating pad, including "an upper transparent plate attached to the optical wave guide for passing the light reflected from the lower reflecting plate." However, it is further stated that Perret discloses the components of the light concentrating pad of Claims 9 and 13. It is reasoned in the Response to Arguments at Pages 3 and 4 of the Office action that either the (1) "top surface of a light guide" (Element 49) or (2) "diffuser" (Element 56) can be considered as an "upper transparent plate attached to a top of the optical wave guide for passing the light reflected from the lower reflecting plate" disclosed in Claims 9 and 13 of the claimed invention. Applicants respectfully disagree.

The "top surface of a light guide" (Element 49) cannot be considered as disclosing "an upper transparent plate attached to the top of the optical wave guide" for at least the following reasons. Perret discloses all edges 30, 32, 34 and 36, the *top surface* 49 and the bottom surface 51 of the light guide 14 are initially high polished. (Col. 4, lines 43-47.) That is, the "top surface" (Element 49) is contained in and is a part of the "light guide" (Element 14), which is considered as the equivalent of the optical wave guide (Element 352) of the claimed invention. (See Figure 3 of the claimed invention.) In sum, because the "top surface of a light guide" (Element 49) is not attached to the top of the optical light guide, but itself is a part of the optical light guide, it cannot be considered as the "upper transparent plate attached to a top of the optical wave guide for passing the light reflected from the lower reflecting plate" disclosed in Claims 9 and 13 of the claimed invention.

Secondly, at Page 9 of the Office action, the virtual bulb 52 is considered as disclosing the "light concentrating plate" of the claimed invention.

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Claims 9 and 13 are amended to recited, *inter alia*,

“a light concentrating plate reflecting the light incident from the light source into the light concentrating pad; and
an optical wave guide for passing the light reflected from the light concentrating plate.”

Perret disclose light 58 is injected into the light guide 14 (considered as disclosing the “optical wave guide”) using bulbs 16 having an aperture 40 allowing the light to be emitted to edges 30, 32, 34 of the light guide 14, the aperture 40 being aligned with an associated *light receiving edge* of the light guide 14. (Col. 5, lines 6-14, Col. 14, lines 31-46 and Figure 1.) Due to leakage of light on *non-light injected edges* or *edges that are not associated with the aperture 40 of the associated bulb 16*, a highly reflective coating or tape is covered on the front edge 36 of the light guide 14 to create a virtual bulb 52. (*Id.*) That is, the virtual bulb 52 is disposed where light is not incident to compensate for light leakage. Therefore, Perret does not disclose a light concentrating plate reflecting the light incident from the light source into the light concentrating pad and an optical wave guide for passing the light reflected from the light concentrating plate of amended Claims 9 and 13.

Thus, Lyon and Perret, alone or in combination, do not teach or suggest *all of the limitations* of amended Claims 9 and 13. Therefore, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify or combine the references, or a reasonable likelihood of success in forming the claimed invention by the Examiner's suggestion of modifying or combining the reference. Thus, here again, *prima facie* obviousness does not exist regarding amended Claims 9 and 13 with respect to Lyon and Perret.

Applicants respectfully submit that Claims 9 and 13 are not further rejected or objected and are therefore allowable. Claims 10-12 and 14-16 variously depend from Claims 9 and 13, respectively, and are correspondingly allowable. Reconsideration and allowance of Claims 9-16 are respectfully requested.

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Conclusion

All of the objections and rejections are herein overcome. In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. No new matter is added by way of the present Amendments and Remarks, as support is found throughout the original filed specification, claims and drawings. Prompt issuance of Notice of Allowance is respectfully requested.

The Examiner is invited to contact Applicants' attorney at the below listed phone number regarding this response or otherwise concerning the present application.

Applicants hereby petition for any necessary extension of time required under 37 C.F.R. 1.136(a) or 1.136(b) which may be required for entry and consideration of the present Reply.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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